

## ABSTRACT

An electric power steering device having a resin gear used in a speed reduction gear mechanism and the resin gear used for the device are provided. The speed reduction gear mechanism includes a driven gear that is the resin gear integrally formed by fitting a resin part having gear teeth formed on the outer peripheral surface thereof to the outside of a metal core and a drive gear meshed with the driven gear. The resin part of the resin gear is formed of a resin composition having, as a base resin, a polyamide resin containing 10 to 50% by weight of glass fiber of 5 to 9  $\mu\text{m}$  in diameter, and has excellent wear resistance, durability, and dimensional stability. Grease on the meshed surfaces of the gears has such a composition that includes a thickener and 3 to 10% by weight of a wax having a melting point or softening point in the range of 70 to 130°C in a base oil formed mainly of at least one oil selected from mineral oil, poly  $\alpha$ -olefin oil, and alkyl polyphenyl ether.